

DECLARATION  
AND POWER OF ATTORNEY  
U.S.A.

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ATTORNEY'S DOCKET NO.  
P63083US0

ALL PATENTS, INCLUDING DESIGN  
FOR APPLICATION BASED ON PCT PARIS CONVENTION.  
NON PRIORITY: OR PROVISIONAL APPLICATIONS

As a below named inventor, I declare that my residence, post office address and citizenship are stated below next to my name, the information given herein is true, that I believe that I am the original, first and sole inventor (if only one name is listed at 201 below), or an original, first and joint inventor (if plural inventors are named below at 201-203, or on additional sheets attached hereto) of the subject matter which is claimed and for which patent is sought on the invention entitled:

**ORTHOGONAL COMPLEX SPREADING METHOD FOR MULTICHANNEL AND APPARATUS THEREOF**

which is described and claimed in: ☐ PCT International Application No. \_\_\_\_\_ filed \_\_\_\_\_

☒ the attached specification ☐ the specification in application Serial No. \_\_\_\_\_ filed \_\_\_\_\_

(if applicable) and amended on \_\_\_\_\_

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, 1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, 119 (a)-(d) of any foreign applications) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

Prior Foreign Application(s)

Priority Claimed

97-65375 Republic of Korea 2/Dec./1997  
(Number) (Country) (Day/Month/Year Filed)

☒ ☐  
Yes No

98-11923 Republic of Korea 4/Apr./1998  
(Number) (Country) (Day/Month/Year Filed)

☒ ☐  
Yes No

I hereby claim the benefit under Title 35, United States Code, 119(e) of any United States provisional application(s) listed below:

Application No. \_\_\_\_\_ Filing Date \_\_\_\_\_ Application No. \_\_\_\_\_ Filing Date \_\_\_\_\_

I hereby claim the benefit under Title 35, United States Code, 120 of any United States applications) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, 112, I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application:

(Application Serial No.)

(Filing Date)

(Status: patented, pending, abandoned)

**POWER OF ATTORNEY:** As a named inventor, I hereby appoint the following attorneys (Registration No.) to prosecute this application, receive and act on instructions from my agent, and transact all business in the Patent and Trademark Office connected therewith. HARVEY B. JACOBSON, JR. (20,851); D. DOUGLAS PRICE (24,514); JOHN CLARKE HOLMAN (22,769); MARVIN R. STERN (20,640); MICHAEL R. SLOBASKY (26,421); JONATHAN L. SCHERER (29, 851); IRWIN M. AISENBERG (19,007); WILLIAM E. PLAYER (31,409)

SEND CORRESPONDENCE TO:

JACOBSON, PRICE, HOLMAN & STERN  
PROFESSIONAL LIMITED LIABILITY COMPANY  
400 Seventh Street, N.W.  
Washington, D.C. 20004

DIRECT TELEPHONE CALLS TO:

(please use Attorney's Docket No.) (202) 638-6666

JACOBSON, PRICE, HOLMAN & STERN  
PROFESSIONAL LIMITED LIABILITY COMPANY

\*Inventor(s) name must include at least one unabbreviated first or middle name.

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☒ Additional inventors are named on separately numbered sheets attached hereto.

2 0 4	FULL NAME OF INVENTOR	FAMILY NAME <b>Kim</b>	GIVEN NAME <b>Jung Im</b>		MIDDLE NAME
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2 0 5	FULL NAME OF INVENTOR	FAMILY NAME <b>Kim</b>	GIVEN NAME <b>Tae Joong</b>		MIDDLE NAME
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I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment or both, under section 1001 of Title 18 of the United States Code; and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

SIGNATURE OF INVENTOR 201* <i>Bang, Seung Chan</i>	SIGNATURE OF INVENTOR 202* <i>Shimjae Byong</i>	SIGNATURE OF INVENTOR 203* <i>Haentel</i>
DATE September 21, 1998	DATE September 21, 1998	DATE September 21, 1998
SIGNATURE OF INVENTOR 204* <i>Junin Kim</i>	SIGNATURE OF INVENTOR 205* <i>Kim, Tae Joong</i>	SIGNATURE OF INVENTOR 206*
DATE September 21, 1998	DATE September 21, 1998	DATE

SMALL ENTITY DECLARATION  
[37 CFR 1.9(c-f)]

Each undersigned declares that:

- (1) ☒ the application attached hereto  
(2) ☐ U.S. Application Serial No. \_\_\_\_\_ filed \_\_\_\_\_  
(3) ☐ U.S. Patent No. \_\_\_\_\_ Issued \_\_\_\_\_

is entitled to the benefits of "small entity" status for paying reduced fees under 35 USC 41(a) and (b) to the Patent and Trademark Office by virtue of the following:

(4) ☐ Each undersigned declares that he/she qualifies as an independent inventor or would qualify had he/she made the invention, as defined in 37 CFR 1.9(c).

(5) ☐ The undersigned declares that he/she is an official empowered to act on behalf of the concern identified below; that this concern qualifies as a small business concern as defined in 37 CFR 1.9(d).

(6) ☒ The undersigned declares the he/she is an official empowered to act on behalf of the organization identified below; that this organization qualifies as a nonprofit organization as defined in

- (a) ☐ 37 CFR 1.9(e)(1)  
(b) ☐ 37 CFR 1.9(e)(2)  
(c) ☐ 37 CFR 1.9(e)(3)  
(d) ☒ 37 CFR 1.9(e)(4)

State law of \_\_\_\_\_

(7) Each person, concern or organization to which I/we have assigned, granted, conveyed or licensed, or am under an obligation under contract or law to assign, grant, convey, or license any rights in the invention is listed below:

- (a) ☐ no such person, concern or organization  
(b) ☒ persons, concerns or organizations listed below

[a separate declaration is required from each named person, concern or organization having rights to this invention averring to their status as "small entities."]

Full Name ELECTRONICS AND TELECOMMUNICATIONS RESEARCH INSTITUTE

Address 161 Gaiung-Dong, Yusong-Ku, Daejeon, Korea

☐ individual ☐ Small Business concern ☒ Nonprofit Organization

I/we acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement of small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28(b))

I/we hereby declare all statements made herein of his/her own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application, any patent issued thereon, or any patent to which this declaration is directed.

(8) <u>Seung Chan Bang</u>	<u>Bang, Seung Chan</u>	<u>September 21, 1998</u>
Typed Name of Inventor	Signature	Date
<u>Jae Ryong Shim</u>	<u>Shim, Jae Ryong</u>	<u>September 21, 1998</u>
Typed Name of Inventor	Signature	Date
<u>Ki Chul Han</u>	<u>Han, Ki Chul</u>	<u>September 21, 1998</u>
Typed Name of Inventor	Signature	Date
<u>Jung Im Kim</u>	<u>Kim, Jung Im</u>	<u>September 21, 1998</u>
Typed Name of Inventor	Signature	Date
<u>Tae Joong Kim</u>	<u>Kim, Tae Joong</u>	<u>September 21, 1998</u>
Typed Name of Inventor	Signature	Date
_____ Typed Name of Inventor	_____ Signature	_____ Date

(9) ELECTRONICS AND TELECOMMUNICATIONS RESEARCH INSTITUTE  
Name of Small Business Concern or Nonprofit Organization

<u>Choan Sik Hwang</u>	By <u>Choan Sik Hwang</u>	<u>9/21/1998</u>
Typed Name	Signature	Date
<u>Group Manager of Intellectual Property Management Team</u>		
Title of Signatory		

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Appln. of:

Seung Chan Bang et al.

Art Unit: Not Yet Assigned

Serial No.: Not Yet Assigned

Examiner: Not Yet Assigned

Filed: September 30, 1998

For: ORTHOGONAL COMPLEX SPREADING METHOD FOR MULTICHANNEL AND APPARATUS THEREOF

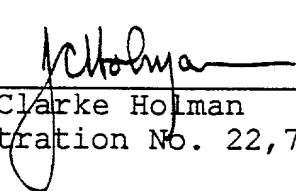
APPOINTMENT OF ASSOCIATE ATTORNEY

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

The undersigned, previously appointed as principal attorney having full power of attorney in the captioned patent, hereby appoint Yoon S. Ham, Limited Recognition, of the firm Jacobson, Price, Holman & Stern, as associate attorney to transact all business before the U.S. Patent and Trademark Office.

Respectfully submitted,

  
\_\_\_\_\_  
John Clarke Holman  
Registration No. 22,769

JACOBSON, PRICE, HOLMAN & STERN  
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Washington, D.C. 20004  
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Date: September 30, 1998

**UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE OFFICE OF ENROLLMENT AND DISCIPLINE**

**LIMITED RECOGNITION UNDER 37 CFR § 10.9(b)**

Yoon S. Ham is hereby given limited recognition under 37 CFR § 10.9(b), as an employee of the law firm of Jacobson, Price, Holman & Stern, to prepare and prosecute patent applications and to represent patent applicants wherein the applicants are clients of the law firm of Jacobson, Price, Holman & Stern, and wherein a registered practitioner who is a member of the law firm of Jacobson, Price, Holman & Stern, is the attorney of record. This limited recognition shall expire on the date appearing below, or when whichever of the following events first occurs prior to the date appearing below: (i) Yoon S. Ham ceases to lawfully reside in the United States, (ii) Yoon S. Ham's employment with the law firm of Jacobson, Price, Holman & Stern, ceases or is terminated, or (iii) Yoon S. Ham ceases to remain or reside in the United States on an H-1B visa.

This document constitutes proof of such recognition. The original of this document is on file in the Office of Enrollment and Discipline of the U.S. Patent and Trademark Office.

**Expires: May 31, 1999**



Karen L. Bovard, Director  
Office of Enrollment and Discipline